

Installation & Operation Manual

This IOM is for the following ProMation Engineering Products:

OPT LCS LG 213 P 120 R/D OPT LCS LG 213 P 230 R/D









Table of Contents

1	 Table of Contents
2	 Product Specifications:
3	 Product Handling and Installation
3	 Wiring Diagram
4	 Component Identification
5	 LCS Feature Selection Chart
5	 Component Identification
5	 Mechanical Data



Product Specifications:

	Local Control Station: LG Actuator dependent						
Torque "Ib/Nm							
For Actuator Series	P2~P13						
Supply Voltage	120vac, 230vac						
Max Inrush Current	N/A						
Running Current	N/A						
Runtime (90°@60/50Hz)	Actuator dependent						
Weight	7lbs/3kg (case and components)						
Mechanical Connections	Actuator Dependent						
Electrical Entry to box	Field punched						
Electrical Terminations	Altech terminal blocks that accept 12-16ga wire.						
Environmental Rating	NEMA 4 (Local Control Station Enclosure)						
Override	Local/Off/Remote Switch						
Control	Proportional						
Duty Cycle	Actuator Dependent						
Controller Case material	Steel						
Ambient Temperature Operating Range	-22°F to +150°F -30°C to +65°C						

Introduction

This document provides necessary information for set-up, calibration, testing and use of the L Series Local Control Stations for quarter-turn electric actuators. Each unit is shipped from the factory with wiring completed as shown in the Wiring Diagram and ready to be installed.

Safety

Safety is a basic factor any time you maintain and operate mechanical equipment. Appropriate handling methods and proper use of tools and clothes can help prevent serious accidents -- accidents which can cause injuries to you or a fellow worker. This manual was created to enable a trained user to install, adjust and troubleshoot your ProMation actuator.

Only competent and trained personnel should install, maintain and operate ProMation Local Control Stations and actuators. Any work related to this actuator must be carried out in accordance with this manual and related codes and regulations. Local workplace health and safety rules should always be followed.



Product Handling and Installation

- 1. Storage: This unit should NOT be stored outside unless it is powered up and has proper conduit terminations. When NOT powered up, it should be stored in a clean, dry environment at all times.
- 2. Note: this enclosure must have water tight EMT fittings, with conduit drainage installed to keep it dry at the time of installation.

Proportional Control =

- 3. The switches located on the front of the enclosure do NOT function as service disconnects.
- 4. Do NOT wire multiple actuators to or from the Local Control Station.

Wiring Diagram

Aux switch cams are factory set at 5° and 85°. Moving these cams will affect the accuracy of the Open and Closed indicators. 12 \otimes 11 \otimes NOT OPEN* 4 1200012 RED 10 \otimes alak **OPEN COM*** \triangleright 1100011 ORG 9 **OPEN*** Note: Actuator MUST be equipped with Option X! Terminal Block Lavout (12X2) \otimes \diamond 10 0 0 0 10 – BLK NOT CLOSED Filename: Altech 875 LG213P120D 8 \triangleleft 90009 — vio \otimes **CLOSED COM*** \triangleright 80008 - YEL 7 FacePlate Filename: 5 hole 5x7 NO display Steel (No Stop \otimes CLOSED* ᡧ BLU -7 0 0 0 7 -RGB 26 CLOSE OPEN \otimes <12-10vdc 25 \otimes 79 **0 0 ø** 79 — VIO (R) G)) FB wн 0 OUT \triangleleft — GRY 24 78 0 0 0 78 [^] M REF \otimes 13 Hole Pat LFR 23 \otimes Door Hole Pattern Back Hole Patte 22 Enclosure front & back hole patterns 53 🛯 🖉 🖉 53 — LT BLU (as viewed from back of door 2000 \otimes MODE COM OPEN CLOSE SWITCH <-POWER 52 0 0 0 52 - GRY 21 \otimes STATUS LOCAL L B THIS IS AN 8X6X6 ENCLOSURE! ORG 1 BC0 **Specify Control:** Ĵ **8** OUT 8 IN ์ M 4-20mA Control 🛞 сом ORG REMOTE OFF LOCAL 2-10vdc Control GRY нот BLK ORG SIG ŵнт IN GRY Γ 8 20VAC 230VAC 1 \otimes L2 Neu WH. NEU Hot L1 41 0 0 0 41 BLK 10001 HOT GND GND **GND** Screw Use this solution for: GND ╩╓ ->> P2~13 Series ╧ PL1200 and 2000 **Actuator Wiring Field Wiring** Local Control Cabinet Wiring Series

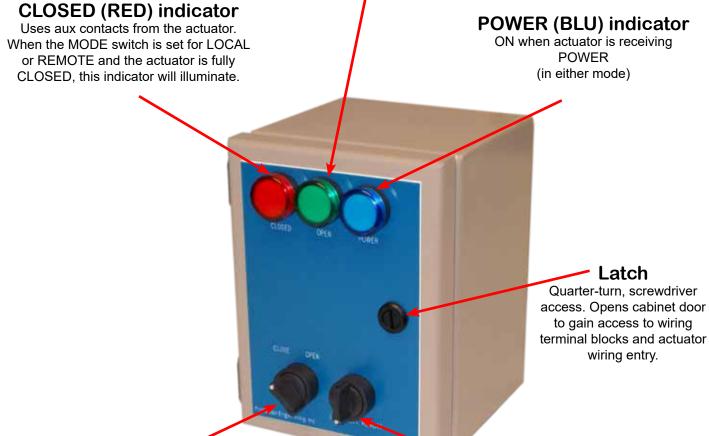


Component Identification

Controls - Front Panel

OPEN (GRN) indicator

Uses aux contacts from the actuator. When the MODE switch is set for LOCAL or REMOTE and the actuator is fully OPEN, this indicator will illuminate.



Close / Stop / Open Switch

This knob switch selects the run direction in which the actuator operates. In the CLOSE position, the actuator will drive closed. In the OPEN position, the actuator will drive open. The actuator will not stop between OPEN and CLOSE positions

Local / Off / Remote Mode Switch

This knob switch selects the control mode in which the actuator operates. In the LOCAL position, the actuator is commanded by the Close / Stop / Open Switch. In the OFF position, the actuator accepts no commands. In the REMOTE position, the actuator is commanded by the field control device, (typically a central control point).

WARNING!

The Mode switch does NOT function as a service disconnect! Power is still present inside this enclosure when the mode switch is OFF.



Component Identification

Product Controls	7.0										
LCS Model	LA	LB	LC	LD	LE	LF	LG	LH	LI	LJ	LK
Product	All	All	All	All	All	P1,PA,PL	P2-13	P1,PA,PL	P2-13	P1,PA, PL55, 11, 22, 44	P2-13 PL68, 12, 20
For On/Off/Jog Actuators Only	Х	Х	Х	Х							
For Proportional Actuators Only					Х	Х	Х	Х	Х	Х	Х
Local/Off/Remote Mode Switch	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х
Close-Stop-Open Switch	Х	Х	Х	Х							
Close-Open Switch (2 Pos)					Х	Х	Х				
Close / Open Indicator Lights		Х	Х	Х		Х	Х	Х	Х	Х	Х
End of Travel (EOT) Outputs to Co	ntroller	Х	Х	Х		Х	Х	Х	Х	Х	Х
Mode Switch Position Signal to C	ontroller		Х	Х		Х	Х	Х	Х	Х	Х
Illuminated Power Indicator				Х		Х	Х				
Full Proportional Control via Poten	tiometer							Х	Х	Х	Х
LCD Display for Incoming Signal								Х	Х	Х	Х
LCD Display for Feedback Signal										Х	Х

Mechanical Data

Product Controls

SAMPLE DIAGRAM

LCS shown is only a sample and may not represent all components completely.

